PCA-6180 Socket 370 Pentium® III/Celeron® SBC with AGP/VGA, Ethernet, and SCSI

Startup Manual

Packing List

Before you begin installing your card, please make sure that the following materials have been shipped:

- 1 PCA-6180 socket 370 Pentium® III/Celeron® processor-based single board computer
- 2 SCSI driven disks (optional)
- 1 FDD cable p/n: 1701340703
- 2 Ultra ATA 100 HDD cables p/n: 1701400452
- 1 printer (parallel port) and COM port cable kit p/n: 1701260305
- 1 ATX-to-AT power cable p/n: 1700000450
- 1 ivory cable for PS/2 keyboard and PS/2 mouse p/n: 1700060202
- 1 USB cable (optional) p/n: 1700100170
- 1 single-slot bracket p/n: 1962159010
- 1 PCA-6180 startup manual
- CD disc and manual (in PDF format)
- Warranty certificate

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Note 1: For detailed contents of the PCA-6180, please refer to the enclosed CD Disc or disk (in PDF format).

Note 2: Acrobat Reader is required to view any PDF file. Acrobat Reader can be downloaded at: ***www.adobe.com/Prodindex/acrobat/readstep.html*** *(Acrobat is a trademark of Adobe.)*

For more information on this and other Advantech products, please visit our website at:

http://www.advantech.com
http://www.advantech.com/nc

For technical support and service, please visit our support website at:

http://support.advantech.com

This manual is for the PCA-6180 series Rev. A1

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Specifications

Standard SBC Functions

- **CPU:** Socket 370 for Intel® Pentium® III/Celeron® processor, FSB 66/100/33
- **BIOS:** Award 2 Mb Flash memory BIOS
- **Chipset:** Intel® 815E
- **System memory:** Three 168-pin DIMM sockets accepts up to 512 MB SDRAM
- **Enhanced IDE interface:** Supports up to four EIDE devices. BIOS auto-detect, PIO Mode 4, Ultra ATA 100/66/33 transfer
- **FDD interface:** Supports up to two FDDs
- **Serial ports:** Two serial RS-232 ports
- **Parallel port:** One parallel port, supports SPP/EPP/ECP mode
- **Keyboard/mouse connector:** Supports a standard PS/2 keyboard and a PS/2 mouse
- **Watchdog timer:** 255 level timer intervals
- **USB:** Four Universal Serial Bus ports

VGA/LCD Interface

- **Chipset:** Chipset integrated
- **Interface:** AGP 2x

Ethernet Interface

- **Chipset:** One onboard Intel® GD82559 and one chipset integrated LAN controller (82562)
- **Ethernet interface:** PCI 10/100 Mbps Ethernet, IEEE 802.3U protocol compatible
- **Connection:** On-board RJ-45 connector x 2

SCSI Interface

- **Chipset:** AIC-7892
- **Interface:** Ultra 160 SCSI supports data transfer up to 160 MB/sec.

Specifications Cont.

Mechanical and Environmental

- **Dimensions (L x W):** 338 x 122 mm
- **Power supply voltage:** +5 V ± 12 V
- **Power requirements:** 6 A @ +5 V (typical, Pentium® III 600 MHz)
- **Operating temperature:** 0 ~ 60° C (depends on CPU used)
- **Weight:** 0.5 kg (weight of board)

Jumpers and Connectors

The board has a number of jumpers that allow you to configure your system to suit your application.

The table below lists the function of each of the jumpers and connectors.

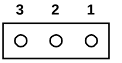
Label	Function
J1	CMOS clear
J2	Watchdog timer output selection

Label	Function
CN1	Primary IDE connector
CN2	Secodary IDE connector
CN3	Floppy driver connector
CN4	Parallel port
CN5	Ultra 160 SCSI connector
CN6	USB port
CN7	VGA connector
CN8	10/100Base-T Ethernet connector 1
CN9	Serial port: COM1
CN10	Serial port: COM2
CN11	PS/2 keyboard and mouse connector
CN12	External keyboard connector
CN13	Infrared (IR) connector
CN14	CPU FAN connector
CN16	Power LED and keyboard lock
CN17	External speaker
CN18	Reset connector
CN19	HDD LED connector
CN20	ATX feature connector
CN21	ATX soft power switch
CN22	H/W monitor alarm
CN23	SM bus connector
CN27	Extension I/O board connector
CN28	Extension I/O board connector

Extension I/O board	
CN31	USB port 0, 1
CN32	USB port 2, 3
CN33	PS/2 mouse connector
CN34	10/100Base-T Ethernet connector 2

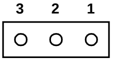
J1: CMOS clear function

Closed pins	Result
1-2	Keep CMOS data*
2-3	Clear CMOS



J2: Watchdog timer output option

Closed pins	Result
1-2	IRQ11
2-3	System reset *



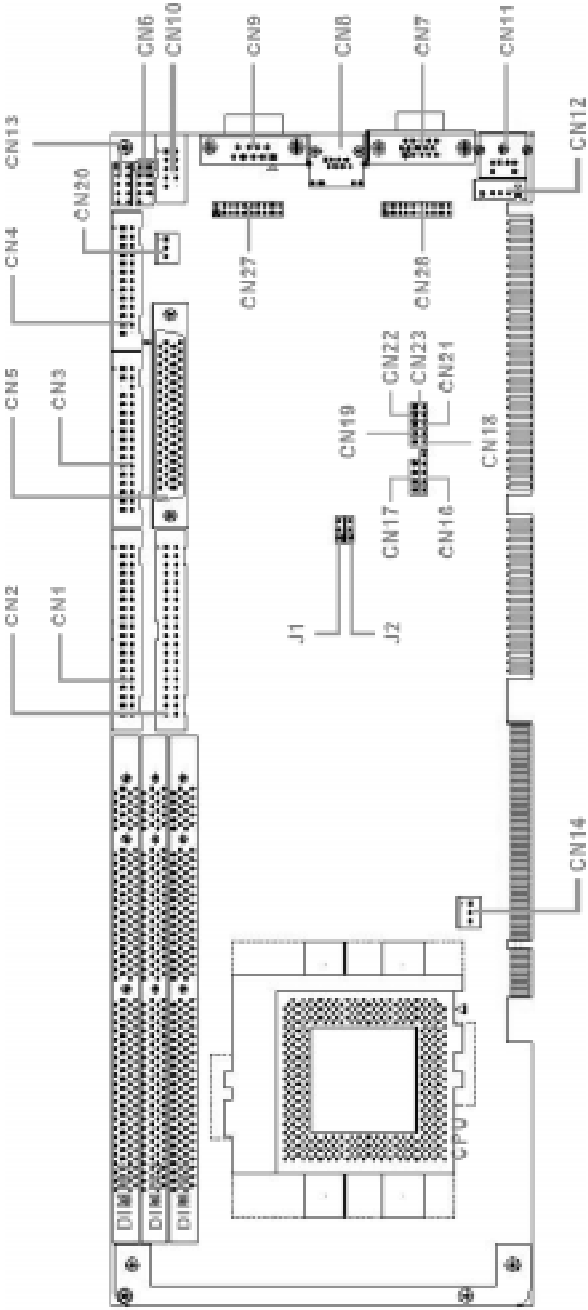
*default setting

Note: *If your system has only one unused expansion slot to accommodate the CPU card, you can replace the standard dual-slot bracket with the single-slot bracket included in your PCA-6180 package.*

Software Installation

The CD disc contains a driver installer program that will lead you through the installation of various device drivers needed to take full advantage of your CPU card. Note that:

- You must install the CSI utility before installing all the other drivers.
- If your computer uses Windows 98SE or Windows ME, and your CPU card has two Ethernet ports, you may have to update the driver Windows automatically installed the first time it detects the LAN devices. Refer to Chapter 6 for details.



Location of PCA-6180's jumpers and connectors